

Serial Number 09/553,107 Filed April 20, 2000
Amendment dated November 13, 2003
Reply to Office Action dated August 14, 2003
Attorney Docket No. GJH-0018 (P1998J0107D)

REMARKS

Claim 19 has been cancelled because the majority of its contents have been incorporated into claim 1.

Claim 14 has been cancelled because the majority of its contents have been incorporated into claim 13.

Claim 1 has been amended to require that at least a portion of the liquid product stream exiting the separation zone, step (e), be combined with at least one of (i) one or more lubricity aid, (ii) one or more viscosity modifier, (iii) one or more antioxidant, (iv) one or more cetane improver, (v) one or more dispersant, (vi) one or more cold flow improver, (vii) one or more metals deactivator, (viii) one or more corrosion inhibitor, (ix) one or more detergent, and (x) one or more distillate or upgraded distillate. Support for this amendment to claim 1 can be found on page 5, third full paragraph of the instant specification, and claim 19 as originally filed.

Claim 13 has been amended to include the limitations of Claim 14. Namely, Claim 13 has been amended to state that the distillate fuel product contains less than about 100 wppm sulfur, has a T10 point greater than 205 °C, a total aromatics content of about 15 to 35 wt.%, a polynuclear aromatics content of less than about 3 wt.%, and wherein the ratio of total aromatics to polynuclear aromatics is greater than about 11. No new matter has been added. Support for the amendment to claim 13 can be found in claim 14 as originally filed.

Claims 9 and 15 have been amended to correct dependencies.

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REJECTION UNDER 35 U.S.C. 102(b)/103(a)

Claims 1-7, 9-16 and 18-19 have been rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over United States Patent Number 5,292,428, Harrison et al. ("Harrison")

EXAMINER'S POSITION

It is the Examiner's position that Harrison teaches a process wherein hydrocarbon feedstock is passed through two or more hydrodesulfurization zones connected in a series, each zone containing a packed bed of solid catalyst wherein the liquid is passed from a first zone to the next until the final zone. The Examiner further mentions: make-up hydrogen being supplied to the hydrodesulfurization zone other than the first zone; hydrogen-containing gas being recovered from a subsequent hydrodesulfurization zone; target sulfur levels, etc. The Examiner believes that Harrison teaches a process and composition that reasonably appears to be either the same or an obvious variation of the instantly claimed product and composition.

The Examiner also states that when an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of", the applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. The Examiner then states that applicants' argument set forth in the communication in response to the previous office action that the recycle stream of Harrison would change the material characteristics of the claimed invention lacks merit. The Examiner states that applicants do not limit the

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amount of sulfur entering the second stage and are read limitations into the claims form the specification.

Further, the Examiner rejects applicants' previous argument with respect to the ratio of hydrogen to feed.

APPLICANTS' POSITION

It is applicants' position that one having ordinary skill in the art and knowledge of Harrison at the time the invention would not have found that Harrison anticipated or obviated the presently claimed invention.

Claim 1, as amended, requires that at least a portion of the liquid product stream exiting the separation zone, step (e), be combined with at least one of (i) one or more lubricity aid, (ii) one or more viscosity modifier, (iii) one or more antioxidant, (iv) one or more cetane improver, (v) one or more dispersant, (vi) one or more cold flow improver, (vii) one or more metals deactivator, (viii) one or more corrosion inhibitor, (ix) one or more detergent, and (x) one or more distillate or upgraded distillate.

The combining of at least a portion of the liquid product produced by the Harrison' process with at least one of (i) one or more lubricity aid, (ii) one or more viscosity modifier, (iii) one or more antioxidant, (iv) one or more cetane improver, (v) one or more dispersant, (vi) one or more cold flow improver, (vii) one or more metals deactivator, (viii) one or more corrosion inhibitor, (ix) one or more detergent, and (x) one or more distillate or upgraded distillate is neither taught nor disclosed in Harrison.

The Examiner is requested to reconsider and withdraw this rejection.

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REJECTION UNDER 35 U.S.C. 102(e)/103(a)

Claims 13, 14 and 15 have been rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over United States Patent Number 6,461,497 B1, Pedersen ("Pedersen")

EXAMINER'S POSITION

It is the Examiner's position that Pedersen teaches a reformulated diesel fuel for low-sulfur diesel fuel. The fuel of Pedersen has an aromatics content less than about 15 vol.%, a sulfur content less than 15 wppm, and a polycyclic aromatics content from about 0.1 to about 1.45 wt.%, preferably less than 1.0 wt.%. The Examiner also states that Pedersen fuel also has a 10% distillation point of at least 430°F. Thus, the Examiner takes the position that the Pedersen fuel either anticipates or obviates the presently claimed distillate product.

APPLICANTS' POSITION

It is applicants' position that one having ordinary skill in the art and knowledge of Pedersen at the time the invention would not have found that the diesel fuel of Pedersen anticipated or obviated the presently claimed distillate fuel composition.

The presently claimed distillate product contains less than about 100 wppm sulfur, has a T10 point greater than 205 °C, a total aromatics content of about 15 to 35 wt.%, a polynuclear aromatics content of less than about 3 wt.%, and wherein the ratio of total aromatics to polynuclear aromatics is greater than about 11.

As the Examiner points out, the diesel fuel of Pedersen contains an aromatics content less than about 15 vol.%, see Pedersen col. 5, lines 16-18. This limitation is

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outside of the presently claimed range of about 15 to about 35 wt.%. Thus, Pedersen does not anticipate the presently claimed distillate fuel product. Also there is no teaching in Pedersen to make a fuel with an aromatics content that is above the less than about 15 vol.% limitation. In fact, Pedersen suggests fuels with aromatic contents lower than 15 vol.% at col. 5 line 66 through col. 6, line 9.

The Examiner is requested to reconsider and withdraw this rejection.

Based on the preceding arguments and amendments, the Examiner is requested to reconsider and withdraw all rejections and pass this application to allowance. The Examiner is encouraged to contact applicants' attorney should the Examiner wish to discuss this application further.

Respectfully submitted:

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